

IMPLEMENTING ARRANGEMENT

between

THE DEPARTMENT OF ENERGY OF THE UNITED STATES OF AMERICA

and

THE MINISTRY OF INDUSTRY AND NEW TECHNOLOGIES OF  
THE REPUBLIC OF KAZAKHSTAN

FOR COOPERATION IN THE FIELD OF

NUCLEAR MATERIAL SAFEGUARDS AND SECURITY

The Department of Energy of the United States of America (USDOE) and the Ministry of Industry and New Technologies of the Republic of Kazakhstan (MINT RK), hereinafter referred to as the "Parties",

Having a mutual interest that nuclear material is managed worldwide in the most secure way, in full compliance with the Treaty on the Non-Proliferation of Nuclear Weapons of July 1, 1968, and the safeguards system of the International Atomic Energy Agency (IAEA), including the Additional Protocol;

Sharing the view that nuclear material safeguards and security should apply worldwide and meet the highest possible standards;

Desiring to take all necessary steps to prevent dissemination of weapons of mass destruction and the material, technologies and know-how related to them, as well as nuclear terrorism;

Noting that USDOE has launched the Next Generation Safeguards Initiative (NGSI);

Noting that MINT RK intends to participate in fulfilling the objectives of NGSI, building upon MINT RK's longstanding experience with IAEA safeguards;

Taking note of the Agreement between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning Control, Accounting and Physical Protection of Nuclear Material to Promote the Prevention of Nuclear Weapons Proliferation of December 13, 1993, as amended and extended (the "MPC&A Agreement"), which is subject to the provisions of the Agreement between the United States of America and the Republic of Kazakhstan Concerning the Destruction of Silo Launchers of Intercontinental Ballistic Missiles, Emergency Response, and the Prevention of Proliferation of Weapons of Mass Destruction of December 13, 1993, as extended and amended (the "CTR Agreement"); and

Noting that pursuant to paragraph 1 of Article II of the MPC&A Agreement, responsibility for implementing the activities under the MPC&A Agreement has been delegated to USDOE as the designated agent of the U.S. Department of Defense, and to the Ministry of Energy and Mineral Resources of the Republic of Kazakhstan (now to MINT RK as related to reorganization of the Ministry of Energy and Mineral Resources (MEMR) and the transfer of MEMR's functions in the nuclear sector to MINT RK) as Kazakhstan's Executive Agent of the CTR Agreement,

HAVE AGREED AS FOLLOWS:

#### Article 1 – Definitions

As used in this Implementing Arrangement:

"MPC&A Agreement" means the Agreement between the Department of Defense of the United States of America and the Ministry of Defense of the Republic of Kazakhstan Concerning Control, Accounting and Physical Protection of Nuclear Material to Promote the Prevention of Nuclear Weapons Proliferation of December 13, 1993, as amended and extended;

"CTR [Cooperative Threat Reduction] Umbrella Agreement" means the Agreement between the United States of America and the Republic of Kazakhstan Concerning the Destruction of Silo Launchers of Intercontinental Ballistic Missiles, Emergency Response, and the Prevention of Proliferation of Weapons of Mass Destruction of December 13, 1993, as extended and amended;

"Information" means unclassified nuclear energy-related regulatory, safety, security, safeguards, radioactive waste management, scientific, or technical data, including information on results or methods of assessment; research; and any other knowledge provided, created or exchanged under this Implementing Arrangement.

## Article 2 - Objective

1. The objective of this Implementing Arrangement is to provide a framework for cooperation between USDOE and MINT RK on mutually agreed upon topics and related training in the field of nuclear material safeguards and security, including research and development.
2. This Implementing Arrangement and all activities undertaken in accordance with this Implementing Arrangement shall be subject to and governed by the provisions of the MPC&A Agreement, which is subject to the CTR Umbrella Agreement. In the event of any inconsistency between this Implementing Arrangement and the MPC&A Agreement, the provisions of the MPC&A Agreement shall prevail. If the provisions of the MPC&A Agreement in question are inconsistent with the provisions of the CTR Umbrella Agreement, the provisions of the latter shall prevail.
3. Cooperation between the Parties shall be conducted on the basis of mutual benefit, equality, and reciprocity.
4. Each Party shall conduct the activities contemplated by this Implementing Arrangement in accordance with the laws of its respective country.

## Article 3 - Areas of Cooperation

The areas of cooperation in the field of nuclear material safeguards and security covered by this Implementing Arrangement shall mainly focus on:

- a. safeguards systems analysis for IAEA safeguards;
- b. accounting and control technologies and measurement equipment for nuclear and other radioactive materials;
- c. improved analytical methods and methodologies of measurements;
- d. containment and surveillance technologies for nuclear materials and nuclear facilities;
- e. secure methods for safeguards data storage, retrieval and communication;
- f. remote monitoring technologies;
- g. nuclear safeguards and security system development and implementation;
- h. nuclear safeguards and security training courses;

- i. nuclear materials management, nuclear safety, and radioactive waste management;
- j. laws and regulations relating to the safe and secure management of nuclear materials;
- k. analytical tools and methodologies in nuclear forensics, including physical and chemical methods for forensics analyses and related data bases;
- l. open source information tools;
- m. cooperation with third countries and relevant international organizations (including the International Atomic Energy Agency) that may contribute to the improvement of nuclear safeguards and security;
- n. security enhancements to high activity radioactive sources in use and in storage and to the facilities at which they are located, and secure transport of radioactive sources within Kazakhstan; and
- o. other areas of cooperation as may be added by written agreement of the Parties.

#### Article 4 - Forms of Cooperation

Cooperation under this Implementing Arrangement may include, but is not limited to, the following forms:

- a. exchange of scientists, engineers and other specialists, researchers, and trainers for agreed periods for participation in activities conducted by the Parties or their contractors;
- b. the use by one Party of facilities which are owned by the other Party or in which research and development activities are being sponsored by the other Party;
- c. exchange of scientific and technical information, including results of research and development;
- d. exchange and provision of samples, materials, and equipment (e.g., for testing);
- e. seminars and other meetings on specific topics, including training courses and workshops;

- f. short visits by specialist teams or individuals of a Party to the facilities of the other Party;
- g. collaborative research and development in the areas of cooperation referred to in Article 3 of this Implementing Arrangement;
- h. technical assistance, planning, and project management support pertaining to implementation of the cooperation undertaken under this Implementing Arrangement; and
- i. other specific forms of cooperation as may be added by written agreement of the Parties.

#### Article 5 - Management

1. A Permanent Coordinating Group (PCG) is hereby established in order to:
  - a. ensure the appropriate coordination for the implementation of this Implementing Arrangement;
  - b. evaluate the status of cooperation under this Implementing Arrangement;
  - c. identify priority areas of cooperation among those described in Article 3 of this Implementing Arrangement;
  - d. define the specific tasks to be undertaken in each of the areas of cooperation listed in Article 3; and
  - e. assess the work done within each specific area and task, and decide on their follow-up (e.g., completion, prolongation, cancellation).
2. The Parties shall each name one individual to act as coordinator in order to supervise the execution of this Implementing Arrangement.
3. The PCG shall be co-chaired by the coordinators and shall meet, on an annual basis, alternately in Kazakhstan, in the United States of America, or at another location as mutually agreed to by the coordinators. The PCG will be composed of the coordinators and the project managers invited by the coordinators.
4. The PCG shall approve action sheets for cooperative projects undertaken under this Implementing Arrangement. These actions sheets shall specify the tasks to be undertaken, the time schedule, and the resources involved on either side. Each cooperative project that may involve the sharing of costs or that may give rise to the creation of intellectual property shall be set forth in a written Project Annex, which shall be subject to this Implementing Arrangement.

5. Day-to-day management of the cooperation under this Implementing Arrangement shall be carried out by project managers designated by the coordinators. The managers shall agree on specific research activities in accordance with Articles 2 and 3 of this Implementing Arrangement and within policy guidelines set by the coordinators. Managers shall be responsible for the working contacts between the Parties.

#### Article 6 - Intellectual Property Rights

The protection and allocation of intellectual property, and the protection of business-confidential information, created or furnished under this Implementing Arrangement shall be governed by the Annex "Intellectual Property Rights" (the "Annex") attached to and constituting an integral part of this Implementing Arrangement.

#### Article 7 - Sharing of Information

1. Subject to the national laws of its country, obligations to third parties, and to provisions of this Implementing Arrangement, each Party and its designees shall undertake to make freely available to the other Party and its designees any information which is required for the execution of this Implementing Arrangement and which the transmitting Party may lawfully disclose.
2. The Parties support, subject to the provisions of the Annex, the widest possible dissemination of information which they have the right to disclose, either in their possession or available to them, and which is either developed jointly or intended to be provided or exchanged pursuant to this Implementing Arrangement.
3. Information transmitted by one Party to the other Party under this Implementing Arrangement and related Project Annexes shall be accurate to the best knowledge and belief of the transmitting Party. Any equipment or materials transferred by one Party to the other Party under this Implementing Arrangement shall be suitable for its or their intended use to the best knowledge and belief of the transmitting Party. The transmitting Party does not warrant the suitability of the information, equipment or materials transmitted for any particular use or application by the receiving Party or by any third party. Information developed jointly by the Parties shall be accurate and jointly developed equipment and materials shall be suitable for their intended use, to the best knowledge and belief of both Parties. Neither Party warrants the accuracy of the jointly developed information or the appropriateness of jointly developed equipment or materials, nor their suitability for any particular use or application by either Party or by any third party.

### Article 8 – Equipment, Supplies, Materials, and Training

1. USDOE may provide to MINT RK or its designee equipment, supplies, materials, and training. The recipient shall use all such equipment, supplies, materials, and training only for the purposes stated in Article 2, paragraph 1 of this Implementing Arrangement.
2. Each Party shall promptly provide to the other Party all information arising from the examination or testing of samples or materials exchanged under this Implementing Arrangement. Business-confidential information, as defined in Section IV. of the Annex, which was developed prior to or outside the scope of this Implementing Arrangement, shall remain business-confidential information even though it is contained in the results of an examination or testing of samples or materials. Such information shall be identified as business-confidential by the Party asserting its business-confidential nature as soon as possible after disclosure of all information arising from the examination or testing is made to such Party, and the other Party shall be immediately advised of that identification. It is further understood and agreed that one Party providing samples or materials to the other Party may also provide a partial or complete list of the types of information which will arise from the examination or testing of such samples or materials and which is business-confidential information as defined in Section IV. of the Annex. All such business-confidential information is to be protected as set out in Section IV. of the Annex.

### Article 9 - Settlement of Disputes

All questions or disputes related to activities carried out under this Implementing Arrangement shall be settled by consultations between the Parties, except as provided in Section II.D. of the Annex.

### Article 10 - Participation of Experts and Other Organizations

1. By mutual agreement, the Parties may invite experts and expert organizations to participate, at their own expense unless one or both Parties elect to fund such participation, in the cooperative activities contemplated by this Implementing Arrangement.
2. Each Party, following written notification to the other Party, may delegate responsibilities for the implementation of this Implementing Arrangement to other authorized bodies of its respective government.

Article 11 - Entry into Force, Duration, Amendment and Termination

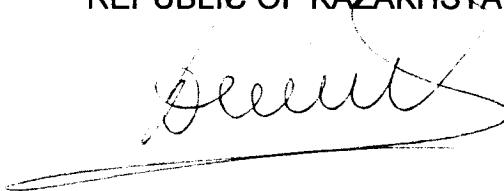
1. This Implementing Arrangement shall enter into force upon signature and shall remain in force for the duration of the MPC&A Agreement.
2. This Implementing Arrangement may be amended at any time in writing by the Parties' mutual consent.
3. The Parties may by mutual consent in writing terminate this Implementing Arrangement at any time. Alternatively, a Party that wishes to terminate its participation in this Implementing Arrangement shall provide three months' prior notification in writing to the other Party.

DONE in duplicate, at Washington on the 10<sup>th</sup> day of November 2011 and at Astana, on the 25<sup>th</sup> day of November 2011, in the English and Russian languages, both texts being equally authentic.

FOR THE DEPARTMENT OF ENERGY  
OF THE UNITED STATES OF AMERICA:



FOR THE MINISTRY OF INDUSTRY  
AND NEW TECHNOLOGIES OF THE  
REPUBLIC OF KAZAKHSTAN:



Annex

to

Implementing Arrangement Between the Department of Energy of the United States  
of America and the Ministry of Industry and New Technologies of the Republic of  
Kazakhstan for Cooperation in the Field of Nuclear Material Safeguards and Security

Intellectual Property Rights

Pursuant to Article 6 of this Implementing Arrangement:

I. General Obligation

The Parties shall ensure adequate and effective protection of intellectual property created or furnished under this Implementing Arrangement and relevant Project Annexes. Rights to such intellectual property shall be allocated as provided in this Annex.

II. Scope

- A. This Annex is applicable to all cooperative activities undertaken pursuant to this Implementing Arrangement, except as otherwise specifically agreed by the Parties or their designees.
- B. For purposes of this Implementing Arrangement, "intellectual property" shall mean the subject matter listed in Article 2 of the Convention Establishing the World Intellectual Property Organization, done at Stockholm, July 14, 1967, and may include other subject matter as agreed by the Parties.
- C. Each Party shall ensure, through contracts or other legal means with its own participants, if necessary, that the other Party can obtain the rights to intellectual property allocated in accordance with this Annex. This Annex does not otherwise alter or prejudice the allocation between a Party and its nationals, which shall be determined by the laws and practices of that Party's country.
- D. Disputes concerning intellectual property arising under this Implementing Arrangement shall be resolved through discussions between the concerned participating institutions or, if necessary, the Parties or their designees. Upon mutual agreement of the Parties, a dispute shall be submitted to an arbitral tribunal for binding arbitration in accordance with the applicable rules of international law. Unless the Parties or their designees agree otherwise in writing, the arbitration rules of the United Nations Commission on International Trade Law (UNCITRAL) shall govern.

E. Termination of this Implementing Arrangement shall not affect rights or obligations under this Annex.

### III. Allocation of Rights

- A. To the extent consistent with applicable law, each Party shall be entitled to a non-exclusive, irrevocable, royalty-free license in all countries to translate, reproduce, and publicly distribute scientific and technical journal articles, reports, and books directly arising from cooperation under this Implementing Arrangement. All publicly distributed copies of a copyrighted work prepared under this provision shall indicate the names of the authors of the work, unless an author explicitly declines to be named.
- B. Rights to all forms of intellectual property, other than those rights described in paragraph III.A. of this Annex, shall be allocated as follows:
  - (1) Visiting researchers shall receive rights, awards, bonuses and royalties in accordance with the policies of the host institution.
  - (2) (a) Any intellectual property created by persons employed or sponsored by one Party under cooperative activities other than those covered by paragraph III.B.(1) of this Annex shall be owned by that Party. Intellectual property created by persons employed or sponsored by both Parties shall be jointly owned by the Parties. In addition, each creator shall be entitled to awards, bonuses and royalties in accordance with the policies of the institution employing or sponsoring that person.  
  
(b) Unless otherwise agreed in writing in a Project Annex or other arrangement, each Party shall have within its territory a right to exploit or license intellectual property created in the course of the cooperative activities.  
  
(c) The rights of a Party outside its territory shall be determined by mutual written consent considering the relative contributions of the Parties and their participants to the cooperative activities, the degree of commitment in obtaining legal protection and licensing of the intellectual property, and such other factors deemed appropriate.  
  
(d) Notwithstanding paragraphs III.B.(2)(a), (b), and (c) of this Annex, if a particular project has led to the creation of intellectual property protected by the laws of one Party's country but not the other, the Party whose country's laws provide for this type of protection shall be entitled to all rights to exploit or license intellectual property worldwide although creators of intellectual property shall nonetheless be entitled to awards, bonuses and royalties as provided in paragraph III.B.(2)(a) of this Annex.

(e) For each invention made under any cooperative activity, the Party employing or sponsoring the inventor(s) shall disclose the invention promptly to the other Party, together with any documentation and information necessary to enable the other Party to establish any rights to which it may be entitled. Either Party may ask the other Party in writing to delay publication or public disclosure of such documentation or information for the purpose of protecting its rights in the invention. Unless otherwise agreed in writing, the delay shall not exceed a period of six months from the date of disclosure by the inventing Party to the other Party.

#### IV. Business-Confidential Information

In the event that information identified in a timely fashion as business-confidential is furnished or created under this Implementing Arrangement, each Party and its participants shall protect such information in accordance with national laws, regulations, and administrative practices. Information may be identified as "business-confidential" if a person having the information may derive an economic benefit from it or may obtain a competitive advantage over those who do not have it, the information is not generally known or publicly available from other sources, and the owner has not previously made the information available without imposing in a timely manner an obligation to keep it confidential.